

## REMARKS

### I. Introduction

Claims 1-32 are pending in the above application.

Claims 1-17, 22-25 and 27-32 stand rejected under 35 U.S.C. §101.

Claims 1 and 18 stand rejected under 35 U.S.C. §102.<sup>1</sup>

Claims 2-17 and 18-21 stand rejected under 35 U.S.C. §103.

Claims 22-32 stand rejected under 35 U.S.C. §112 ¶1.

Claims 1, 5, 16, 18 and 22 are independent claims.

### II. Amendments

Claims 1, 2, 5, 16, 18, 19, 22, 23, have been amended to more particularly point out that which Applicant regards as the invention therein. No new matter has been added.

### III. Rejections Under 35 U.S.C. §101.

Claims 1-17, 22-25 and 27-32 stand rejected under 35 U.S.C. §101 as being allegedly drawn to non-statutory subject matter because the steps recited therein could allegedly be performed without the aid of a computer. Applicants respectfully traverse the implication in the Office action that only methods which may be performed by a computer constitute statutory subject matter. However, in order to expedite prosecution, Applicants have amended claims 1, 5, 16 and 22 to recite use of a computer, as suggested by the Office action (see pg. 13).

Accordingly, the rejection is believed to be overcome.

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<sup>1</sup> Applicants note that statement on page 3 of the Office action that "claims 1-21 remain rejected under 35 U.S.C. §102" appears to be an error, as the statement of the rejection on page 7 indicates that only claims 1 and 18 are rejected under 35 U.S.C. §102. Further, the original rejection, made in an Office action mailed on July 31, 2002 only rejected claims 1 and 18 under 35 U.S.C. §102. Clarification is respectfully requested.

#### IV. Rejections Under 35 U.S.C. §112

Claims 22-32 stand rejected under 35 U.S.C. §112 ¶1 as allegedly failing to comply with the written description requirement because the limitation in claim 22 “wherein said first score is a stronger indicator of variance than said second score” is not allegedly supported in the specification. Applicants have amended this limitation to read “wherein said first score provides an indicator of variance independent of the indicator of variance provided by said second score.” Support for this limitation may be found at least at pages 7-8 of the specification as properly understood by one skilled in the art.<sup>2</sup>

#### V. Prior Art Rejections

##### A. Anticipation

Claims 1 and 18 stand rejected under 35 U.S.C. §102(b) as being anticipated by Hoeting et al. BAYESIAN MODEL AVERAGING: A TUTORIAL, hereafter “Hoeting”.

Applicants respectfully traverse reliance on Hoeting, as the article has not been established to be prior art to the above application. The above application has a filing date January 23, 2001. The Office action advises that the Hoeting reference was downloaded from a website on July 22, 2002, a date which is clearly after Applicant’s filing date. Hence such download does not establish the reference is prior art to the above application. The Office action appears to suggest that the article should be attributed a date (presumably a publication date) of “November 1999.” However, no evidence has been provided to support this alleged date of

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<sup>2</sup> Applicants note that the one of skill in the art would clearly appreciate that Applicant’s disclosure provides support for the above limitations (see, at least Fig. 2, page 13-25) if not *ipsis verbis* support. See, *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1571-72, 41 USPQ2d 1961 (Fed. Cir. 1997); *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555 (Fed. Cir. 1991).

November 1999, and the Office action does not establish how this date was determined.

Notably, the Hoeting reference itself does not appear to bear any indicia of a publication date.

Applicants respectfully submit that in making a rejection under 35 U.S.C. §102, the first criteria is to establish that a reference is prior art to the claimed invention. See, *In re Cronyn*, 890 F.2d 1158. The statutory phrase “printed publication” has been interpreted to mean that the reference must have been accessible to the public interested in the art; dissemination and public accessibility are the keys to the legal determination whether a prior art reference was published. See, *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1568. In order to discharge this burden, the Office must establish that the “publication date” of the article is prior to the filing date of the above application. As this burden has not been discharged by the Office action, a prima facie rejection under 35 U.S.C. §102 has not been established, and the Hoeting reference cannot be relied upon to reject the claims of the above application.<sup>3</sup>

Moreover, anticipation under 35 U.S.C. § 102 requires that each and every element of the claim be disclosed in a prior art reference as arranged in the claim. See, *Akzo N.V. v. U.S. Int’l Trade Commission*, 808 F.2d 1471 (Fed. Cir. 1986); *Connell v. Sears, Roebuck & Co.*, 220 USPQ 193, 198 (Fed. Cir. 1983).

Hoeting does not disclose a method of segmenting members of a population which include a series of steps including the step of using a computer to predict a plurality of targeted events associated with each population member by using a plurality of segmentation strategies, each targeted event being independently predicted from other targeted events of the plurality of targeted events by a respective segmentation strategy of the plurality of segmentation strategies,

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<sup>3</sup> Applicant notes that the Office cannot perpetuate their failure to establish their burden by declaring their own omission to provide objective evidence of record capable of being dispensed with through a sweeping statement of Official Notice. See, *In re Lee*, 277 F.3d 1338, 1343 “the factual inquiry whether to combine references must be thorough and searching ... it must be based on objective evidence of record ... and cannot be dispensed with.”

and generating a score associated with each prediction, and generating a first composite score for each population member by combining each of the scores for that population member, as recited by amended claims 1 and 18. Hoeting provides a theoretical discussion of implementing “Bayesian Model Averaging.” Hoeting proposes to use Bayesian Model Averaging to overcome the need to choose between two models which may fit a single data set to achieve the same desired target equally well. See, pg. 383, col. 1 second paragraph. Hoeting explains that a Bayesian Model is to be created by integrating distinct models which would be intended to operate on the same data set to predict the same target by performing a complex mathematical integration of these models, See, equations 1-7. Under ideal conditions, a single mathematical formula is created as the “Bayesian Model”, which an operator may then plug in the data set to predict the specific target. In short, Hoeting describes a solution to a problem using the same data set for a number of models which are intended to predict the same target information. Hoeting does not disclose to use predict a plurality of different target events using different segmentation strategies and then to generate a composite score based on the results (score) of the respective predictions, as recited by amended claim 1 and 18.

Accordingly, Hoeting does not disclose each and every element of amended claim 1 or 18, and hence does not anticipate amended claim 1 or 18 even if Hoeting is considered prior art to the above application.

**B. Obviousness**

Claims 2-17 and 18-21 stand rejected under 35 U.S.C. §103 as being unpatentable over Hoeting in view of Applicants Admitted Prior Art (hereafter "APA").<sup>4</sup>

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *Ecolchem Inc. v. Southern California Edison Co.*, 227 F.3d 1361, 56 U.S.P.Q.2d (BNA) 1065 (Fed. Cir. 2000); *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2D (BNA) 1614, 1617 (Fed. Cir. 1999); *In re Jones*, 958 F.2d 347, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992); and *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). See also MPEP 2143.01.

**Claims 2-4 and 19-21**

Neither Hoeting nor APA, taken alone or in combination, disclose or suggest a method of segmenting members of a population which include a series of steps including the step of using a computer to predict a plurality of targeted events associated with each population member by using a plurality of segmentation strategies, each targeted event being independently predicted from other targeted events of the plurality of targeted events by a respective segmentation strategy of the plurality of segmentation strategies, and generating a score associated with each prediction, and generating a first composite score for each population member by combining

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<sup>4</sup> Applicants note that the Office action appears to suggest that a description of Applicant's own implementation of a variance in Applicant's disclosure is being considered as an admission of prior art. See, Office action, page 8, rejection of claim 2. Of course, Applicant's description as to how one of skill in the art would use their existing knowledge of the art to interpret the express disclosure of Applicant's invention is not a statement that Applicant's express disclosure is prior art. As the scope of what is being considered as admitted prior art seems to be confused, clarification is respectfully requested from the Examiner.

each of the scores for that population member, as recited by amended claims 1 and 18, from which claims 2-4 and 19-21 depend. Hoeting does not disclose such as discussed above. APA also does not disclose such and, as best understood by the Applicants, the Office action does not rely on APA as disclosing such.

Accordingly, as neither Hoeting nor APA disclose the above features of claims 1 and 18, which are incorporated in claims 2-4 and 19-21 via their dependence on claims 1 and 18, respectively, neither Hoeting nor APA, taken alone or in combination disclose all of the limitations of the above claims. Hence, neither Hoeting nor APA, taken alone or in combination render the above claims unpatentable as being obvious.

#### **Claims 5-15**

Neither Hoeting nor APA, taken alone or in combination, disclose or suggest a method of segmenting members of a population which include a series of steps including the step of using a computer to predict a plurality of targeted events associated with each population member by using a plurality of segmentation strategies, each targeted event being independently predicted from other targeted events of the plurality of targeted events by a respective segmentation strategy of the plurality of segmentation strategies, and generating a score associated with each prediction; determining a set of scores for each population member, wherein the set of scores for a particular population member is comprised of the scores associated with each prediction for the population member; generating for each population member a first composite score based on that member's set of scores, as recited by amended claim 5. As discussed above, Hoeting does not disclose to determine a plurality of targeted events using a plurality of segmentation strategies and then to generate a composite score based on the results (score) of the respective predictions,

as recited by amended claim 5. APA also does not disclose such and, as best understood by the Applicants, the Office action does not rely on APA as disclosing such.

Accordingly, as neither Hoeting nor APA disclose the above features of claim 5, nor claims 6-15 which incorporate the features of claim 5 via their dependence on claim 5, neither Hoeting nor APA, taken alone or in combination disclose all of the limitations of the above claims. Hence, neither Hoeting nor APA, taken alone or in combination render the above claims unpatentable as being obvious.

#### **Claims 16-17**

Neither Hoeting nor APA, taken alone or in combination, disclose or suggest a method of segmenting members of a population which include a series of steps including the step of running more than one segmentation strategy against the population using a computer to generate for each strategy a score for each population member, each segmentation strategy providing a prediction of a different target event than other segmentation strategies of the more than one segmentation strategy; generating a first composite score for each population member by averaging the set of ranks for that member; assigning a first composite rank to each population member in accordance with the first composite scores; generating a second composite score for each population member based on an ANOVA comparison of the sets of ranks; assigning a second composite rank to each population member in accordance with the second composite scores; generating an overall score for each population member by averaging the first and second composite ranks for that member, as recited by amended claim 16. As discussed above, Hoeting does not disclose to determine a plurality of targeted events using a plurality of segmentation strategies and then to generate a composite score based on the results (score) of the respective

predictions, as recited by amended claim 5. APA also does not disclose such and, as best understood by the Applicants, the Office action does not rely on APA as disclosing such.

Accordingly, as neither Hoeting nor APA disclose the above features of claim 16, nor claim 17 which incorporates the features of claim 16 via its dependence on claim 16, neither Hoeting nor APA, taken alone or in combination disclose all of the limitations of the above claims. Hence, neither Hoeting nor APA, taken alone or in combination render the above claims unpatentable as being obvious.

Moreover, in each of the above rejections the Office action extensively relies on "known art" to allegedly establish the existence of claim elements and the motivation to combine the allegedly known element with the other elements of the claims. Indeed, the reliance of "known art" is relied upon to reject most of the of the claims. For example, in rejecting claim 16 at least, the "known art" appears to be relied upon as satisfying more of the limitations than the cited art of record. This approach to rejecting claims fails to meet the statutory requirement of basing a rejection on an "objective evidence of record", a requirement which "cannot be dispensed with" as dictated to the USPTO by the Court of Appeals for the Federal Circuit. See, *In re Lee*, 277 F.3d 1338, 1343 (Fed. Cir. 2002). See, also, *In re Thrift*, 298 F.3d 1357, 1364 "recently, in *In re Lee*, 277 F.3d 1338, 61 U.S.P.Q.2D (BNA) 1430 (Fed. Cir. 2002), we held that the Board's reliance on 'common knowledge and common sense' did not fulfill the agency's obligation to cite references to support its conclusions." Likewise, the Examiner's reliance on "common knowledge" does not comply with the statutory requirements to establish a prima facie case of obviousness based on objective evidence. Accordingly, Applicants respectfully traverse.



Furthermore, even if reliance on "known art" were permissible, "general knowledge" of particular elements is not objective evidence that the combination set forth in the claims, as a whole, are obvious within the meaning of 35 U.S.C. § 103. In addition, mere conclusions that various aspects of the claimed invention are obvious does not support a **prima facie** case of obviousness under 35 U.S.C. § 103. In this regard, Applicants stress that what may be known in some general context does not necessarily render the claimed subject matter as a whole obvious within the meaning of 35 U.S.C. § 103. The Examiner is also reminded that it is improper to distill the invention, or a limitation of a claim, down to a "gist or thrust" of an invention. See MPEP 2141.02. Accordingly, the Examiner must consider and give effect to every limitation of the claims in order to consider the invention as a whole.

Moreover, a prior art reference must be considered as a whole, including portions that teach away from the claimed invention. A teaching away rebuts a conclusion of obviousness. See, *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303, see also MPEP 2141.02, sixth heading. The clear intention of the Hoeting reference is to avoid the need to provide individual rankings to the scores of the combined models. Accordingly, Hoeting in fact teaches away from performing the invention recited in the claims.

Finally, the Office action appears to rely on features allegedly disclosed in the "Equifax article" to add particular features to the teachings of the Hoeting reference and the APA under the guise of "known art". As the mere fact that a particular feature is known does not constitute grounds for a 103 rejection, the Examiner is respectfully requested to clarify how the Equifax article is being used in the rejection.

**VI. Conclusion**

Having fully responded to all matters raised in the Office Action, Applicants submit that all claims are in condition for allowance, an indication for which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,  
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